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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,920	12/10/2003	Sam Clark Werner	TUC920020121US1 (16093)	5786

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SCULLY, SCOTT, MURPHY, & PRESSER
400 GARDEN CITY PL
GARDEN CITY, NY 11530

EXAMINER	
URICK, MATTHEW T	

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,920	WERNER, SAM CLARK	
	Examiner	Art Unit	
	Matt Urick	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Non-Final Official Action

Status of the Claims

Claims 1-15 are rejected under 35 USC 102

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Grohn (United States Patent No. 6,405,337).

As per claim 1, Grohn discloses:

A method for extending peer-to-peer remote copy system operations for transferring data contents written to a first storage system from a host device to a remote second storage system over a communications link (Grohn column 1 lines 16-28 describe the working environment), said method comprising:

a) setting a timer for a timeout period in which data contents written to said first storage system are to be transferred to said remote second storage system (column 6 lines 28-30, referring to figure 6);

b) determining if a successful transfer of said data contents to said remote second storage system has occurred within said timeout period; and, if no successful transfer has occurred within said timeout period (column 7 lines 14-26),

c) initiating generation of a busy signal for receipt by said host device to prevent suspension of data content transfer operations between said first storage system and said remote second storage system for an additional timeout period, wherein said host device at said first storage system is available to write new data contents to said first storage system for subsequent transfer to said remote second storage system after said additional time out period (column 6 line 64 – column 7 line 7).

As per claim 2, Grohn discloses:

The method for extending peer-to-peer remote copy system operations as claimed in claim 1, wherein prior to step c) and after said step b) the further step of: determining if time remains within said timeout period, and if time remains, continuing attempts to transfer said data contents to said remote second storage system (column 7 lines 8-14).

As per claim 3, Grohn discloses:

The method for extending peer-to-peer remote copy system operations as claimed in claim 1, wherein prior to step c) and after said step b) the further step of:

determining if time remains within said timeout period, and if time does not remain, the further steps of: incrementing a host retry counter for tracking a number of attempts to transfer data contents to said remote second storage system (column 6 line 64 – column 7 line 7);

determining whether a number of host retries exceeds a maximum number of host retries (column 6 line 64 – column 7 line 7),

wherein if the number of host retries does not exceed said maximum number of host retries, then initiating generation of a busy signal according to said step c) (column 6 line 64 – column 7 line 7).

As per claim 4, Grohn discloses:

The method for extending peer-to-peer remote copy system operations as claimed in claim 3, further comprising incrementing said host retry counter according to a weighting factor, said weighting factor determined according to an error type contributing to said unsuccessful transfer within said timeout period (column 6 lines 28-31).

As per claim 5, Grohn discloses:

The method for extending peer-to-peer remote copy system operations as claimed in claim 3, wherein if the number of host retries exceeds said maximum number of host retries, said method further comprising the step of suspending said data content transfer operations between said first storage system and said remote second storage system (column 7 lines 3-7).

As per claim 6, Grohn discloses:

A peer-to-peer remote copy system for transferring data contents written to a first storage system from a host device to a remote second storage system over a communications link, said system comprising:

a timer device for a counting a timeout period in which data contents written to said first storage system are to be transferred to said remote second storage system over said link(column 6 lines 28-30, referring to figure 6);

means for determining if a successful transfer of said data contents to said remote second storage system has occurred within said timeout period (column 7 lines 14-26), and

means for generating a busy signal for receipt by said host device to prevent suspension of data content transfer operations between said first storage system and said remote second storage system for an additional timeout period if no successful transfer has occurred within said timeout period, wherein said host device at said first storage system is available to write new data contents to said first storage system for subsequent transfer to said remote second storage system after said additional time out period (column 6 line 64 – column 7 line 7).

As per claim 7, Grohn discloses:

The peer-to-peer remote copy system as claimed in claim 6, wherein if no successful transfer of said data occurs, said determining means further determining whether time remains within said timeout period, and if time remains, said system continuing attempts to transfer written data contents from a first storage system to said

remote second storage system (column 7 lines 8-14).

As per claim 8, Grohn discloses:

The peer-to-peer remote copy system as claimed in claim 7, further comprising:

a host retry counter means for tracking a number of attempts to transfer data contents to said remote second storage system (column 6 line 64 – column 7 line 7), and

means for determining whether a number of host retry attempts exceeds a maximum number of host retries, said busy signal being generated upon determination that the number of host retries does not exceed said maximum number of host retries (column 6 line 64 – column 7 line 7).

As per claim 9, Grohn discloses:

The peer-to-peer remote copy system as claimed in claim 8, wherein said host retry counter means is incremented according to a weighting factor, said weighting factor determined according to an error type contributing to an unsuccessful transfer within said timeout period (column 6 lines 28-31).

As per claim 10, Grohn discloses:

The peer-to-peer remote copy system as claimed in claim 8, further comprising means for suspending said data content transfer operations between said first storage system and said remote second storage system upon determination that a number of

host retries exceeds said max number of host retries (column 7 lines 3-7).

As per claim 11, Grohn discloses:

A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine (column 3 lines 35-52) to perform method steps for extending peer-to-peer remote copy system operations for transferring data contents written to a first storage system from a host device to a remote second storage system over a communications link, said method steps comprising:

a) setting a timer for a timeout period in which data contents written to said first storage system are to be transferred to said remote second storage system (column 6 lines 28-30, referring to figure 6);

b) determining if a successful transfer of said data contents to said remote second storage system has occurred within said timeout period; and, if no successful transfer has occurred within said timeout period (column 7 lines 14-26),

c) initiating generation of a busy signal for receipt by said host device to prevent suspension of data content transfer operations between said first storage system and said remote second storage system for an additional timeout period, wherein said host device at said first storage system is available to write new data contents to said first storage system for subsequent transfer to said remote second storage system after said additional time out period (column 6 line 64 – column 7 line 7).

As per claim 12, Grohn discloses:

The program storage device readable by a machine as claimed in claim 11, wherein prior to step c) and after said step b) the further step of: determining if time remains within said timeout period, and if time remains, continuing attempts to transfer said data contents to said remote second storage system (column 7 lines 8-14).

As per claim 13, Grohn discloses:

The program storage device readable by a machine as claimed in claim 11, wherein prior to step c) and after said step b) the further step of: determining if time remains within said timeout period, and if time does not remain, the further steps of:

incrementing a host retry counter for tracking a number of attempts to transfer data contents to said remote second storage system (column 6 line 64 – column 7 line 7);

determining whether a number of host retries exceeds a maximum number of host retries (column 6 line 64 – column 7 line 7),

wherein if the number of host retries does not exceed said maximum number of host retries, then initiating generation of a busy signal according to said step c) (column 6 line 64 – column 7 line 7).

As per claim 14, Grohn discloses:

The program storage device readable by a machine as claimed in claim 13, further comprising incrementing said host retry counter according to a weighting factor, said weighting factor determined according to an error type contributing to said

unsuccessful transfer within said timeout period (column 6 lines 28-31).

As per claim 15, Grohn discloses:

The program storage device readable by a machine as claimed in claim 13, wherein if the number of host retries exceeds said maximum number of host retries, the step of suspending said data content transfer operations between said first storage system and said remote second storage system (column 7 lines 3-7).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Urick whose telephone number is (571) 272-0805. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Bryce P. Bonzo

BRYCE P. BONZO
PRIMARY EXAMINER